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IS 11955 (1987): Preferred Current Ratings [ETD 1: Basic Electrotechnical Standards]



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“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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Indian Standard
PREFERRED CURRENT RATINGS

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

Indian Standard

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Indian Standard

PREFERRED CURRENT RATINGS

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 27 March 1987, after the draft finalized by the Basic Electrotechnical Standards Sectional Committee had been approved by the Electrotechnical Division Council.

0.2 Over the last two decades, there had been a significant amount of natural standardization on the matter of preferred current ratings for electrical equipment and conductors in electrical installations. Equipment standards in the relevant clauses almost invariably specify the preferred current ratings considered as standard for the purposes. These standards also allow the desired degree of flexibility to choose alternate values to those specified where there may exist specific situations to warrant them.

0.3 The primary objective of this standard is to summarize the current ratings considered as standard in the country as given in various specifications so as to form a guide on all such matters. For a given voltage ratings, the series of values of current rating provided would give a general idea of incremental power ratings available for any application.

0.4 It may, however, be noted that the actual choice of steps for any specific equipment may vary depending on the type of equipment, their use or other considerations. Several factors go into the selection of the steps. The primary amongst them being the inherent standardization of the size of equipment over the years, which may even provide a good basis for choosing slightly different values than that specified in this standard. Individual equipment committees, while specifying preferred current ratings for a specific equipment may therefore adopt the values given herein, and where relevant specify reasons, if any, for departures made.

0.5 The standard current ratings specified in this standard are those fixed by the International Electrotechnical Commission, in accordance with the principles formulated by ISA Standard 32 'Standard Numbers' which was adopted by the International Federation of the National Standardising Associations at Stockholm in 1934.

0.6 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard covers standard current ratings for electrical equipment and conductors in installations.

2. STANDARD CURRENT RATINGS

2.1 For any particular type of equipment and current carrying conductor, the ratings shall be selected from the values given below:

1	1.25	1.6	2	2.5	3.15	4	5	6.3	8
10	12.5	16	20	25	31.5	40	50	63	80
100	125	160	200	250	315	400	500	630	800
1 000	1 250	1 600	2 000	2 500	3 150	4 000	5 000	6 300	8 000
10 000									

NOTE — The steps may vary according to equipments concerned depending on their use or their properties. The selection of the values to be adopted should be considered in each case on its merits and it may be found that there are good grounds for choosing 1.5-3-6-7.5 instead of 1.6-3.15-6.3-8 as well as their multiples of 10, 100, 1 000.....

*Rules for rounding off numerical values (*revised*).